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U30035PCT

Patent claims

1. Method for analysing of samples in connection with acute cardiovascular diseases, wherein the method comprises the following steps:

(a) obtaining a biological sample to be analysed from a subject;

(b) determining of the concentration of at least one marker selected from soluble CD40-ligand (sCD40L), PAPP-A, and PlGF,

(c) optionally, determining of the concentration of at least one additional marker selected from troponin T (TnT), MPO, NT-proBNP, VEGF, BNP, and additional inflammatory markers, and

(d) comparing the result/s obtained for the sample to be analysed with reference value/s and/or the values from reference samples.

2. Method according to claim 1, wherein the sample to be analysed and/or the reference sample is derived from a human.

3. Method according to claim 1 or 2, wherein the sample to be analysed is selected from the group consisting of peripheral blood or fractions thereof, and cell culture suspensions or fractions thereof.

4. Method according to claim 3, wherein the sample to be analysed is blood plasma.

5. Method according to claim 3, wherein a coagulation inhibitor, in particular heparin, is added to the peripheral blood.

6. Method according to any of claims 1 to 5, wherein the additional inflammatory markers are selected from CRP, (hs)CRP, and IL-10.

7. Method according to any of claims 1 to 5, wherein the analysed markers and combinations thereof are selected from sCD40L; PAPP-A; PlGF; sCD40L + TnT; PAPP-A + TnT; PlGF + TnT; sCD40L+ PAPP-A; sCD40L + PlGF; PAPP-A + PlGF; sCD40L+

PAPP-A + TnT; sCD40L + PlGF + TnT; PAPP-A + PlGF + TnT; sCD40L + PAPP-A + PlGF; and sCD40L + PAPP-A + PlGF + TnT.

8. Method according to claim 7, further comprising the analysis of at least one of the markers MPO, NT-proBNP, BNP, CRP, (hs)CRP, and IL-10.

9. Method according to any of claims 1 to 5, wherein the analysed markers and combinations thereof are selected from CRP, TnT, PAPP-A; CRP, TnT, PAPP-A, IL-10; CRP, TnT, PAPP-A, IL-10, sCD40L, and TnT, PAPP-A, IL-10, sCD40L, VEGF.

10. Method according to any of claims 1 to 9, wherein said determining of the concentration occurs by means of an immunological method by means of marker-binding molecules.

11. Method according to any of claims 1 to 5, wherein said are selected from the group consisting of anti-marker-antibodies or parts thereof, and marker-receptors or parts thereof.

12. Method according to claim 11, wherein said antibodies, parts or fragments thereof comprise polyclonal antibodies, monoclonal antibodies, Fab-fragments, scFv-fragments, and diabodies.

13. Method according to claim 11 or 12, wherein said marker and/or said marker-binding molecules are present in solution or matrix-immobilised.

14. Method according to any of claims 11 to 13, wherein said molecules binding to sCD40L are coupled to one or several detection groups from the group consisting of fluoresceinthioisocyanate, phycoerythrine, an enzyme, and magnetic beads.

15. Method according to any of claims 11 to 14, wherein said marker-binding molecules are detected with an antibody to which one or several detection groups are coupled.

16. Method according to any of claims 11 to 15, wherein the immunological methods are selected from the group consisting of sandwich-enzyme-immunoassays, ELISA, and solid phase immunoassays.

17. Method according to any of claims 1 to 16, wherein said cardiovascular diseases are selected from the group consisting of unstable angina, myocardial infarction, acute coronary syndromes, coronary arterial disease, and heart insufficiency.

18. Diagnostic kit, comprising means for performing the method according to any of claims 1 to 17, optionally together with additional components and/or excipients.

19. Diagnostic kit according to claim 18, comprising gold labelled polyclonal mouse-indicator antibodies, biotinylated polyclonal detection antibodies and a testing device, comprising a fiberglass-fleece.

20. Use of the method according to any of claims 1 to 19 for a diagnosis and/or prognosis of acute cardiovascular diseases and/or for monitoring of their therapies.

21. Use according to claim 20, wherein said therapy comprises the administration of statines, and/or inhibitors of the glycoprotein IIb/III-receptor.